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|                            |              |
|----------------------------|--------------|
| EXAMINER<br>CHANKONG, DOHM |              |
| ART UNIT<br>2152           | PAPER NUMBER |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|----------------------------------------|------------|---------------|
| 3 MONTHS                               | 01/18/2007 | PAPER         |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/022,838             | SHIBATA, ATSUSHI    |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Dohm Chankong          | 2152                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

- 1> This action is in response to Applicant's amendment and remarks, filed 11.8.2006. Claims 9, 10, 14, 19, 20, 24, 28, 29 and 33 are amended. Claims 9-36 are presented for further examination.
- 2> This is a final rejection.

#### *Response to Arguments*

##### I. RESPONSE TO APPLICANT'S ARGUMENTS AND AMENDMENTS

Applicant amends the independent claims to recite that a transmission source address is translated into a management address belonging to a third address system different from first and second address systems of a first and second network, respectively, defined by NAT. Applicant argues that none of the cited references teach this functionality. For the reasons set forth below, the Office respectively disagrees.

- A. Applicant's arguments are not persuasive because Applicant is arguing limitations not present in the claims.

Applicant comments that "a 'real address' which is a transmission source address...is translated into a 'management address' which is a virtual address undefined by NAT" (emphasis in original) [Applicants arguments, pgs. 11-12].

Applicant additionally compares the first and second address system to a local and global address system. While these functions may differentiate from the cited references, the issue is that these limitations are not recited in Applicant's claims.

Taking claim 9 as an example, the claim merely recites translating a transmission source address into a management address belonging to a third address system different from first and second address systems, defined by the NAT. Nothing in the claim mandates that the management address is either a virtual address or that it must be undefined by the NAT (The virtual address limitation is only found in a dependent claim). Giving the claim its broadest reasonable interpretation, the management address simply must be part of an address system that is different from the address systems of a first and second network. The conclusion that a third address system is undefined by NAT does not follow simply because third address system is different from another address system that is defined by the NAT.

Additionally, the “defined by the NAT” modifier is confusing because it simply dangles at the end of the sentence with no clear attachment to any of the address systems and appearing after the first, second and third address systems are mentioned. The claim language is therefore unclear as to whether just the first and second address systems are defined by the NAT as asserted by Applicant. Most important, nothing in the claim limits the third address system to be undefined by the NAT. Further, nothing in the claims disclose that the first and second address systems are local and global address systems.

Previous iteration of the Applicant’s claim, filed 5.17.2006, also suffered from this deficiency. The language disclosed that the management address belonged to an address system different from an address system defined by NAT. Again, nothing in

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the claim specifies that one address system is different from another because one is defined by NAT and another is not.

B. Applicant's arguments are not persuasive because the cited references teach the limitations as claimed.

With respect to the references, Applicant argues that Boden "merely performs translation in addressed defined by the NAT" [pg. 14, ¶2]. As discussed previously, the Office does not interpret the third address system as being undefined by the NAT, merely that the first and second address system are defined by the NAT. Applicant's arguments rest entirely on claim language reciting that the third address system is "different" from a first and second address system.

Both Boden and Crump disclose a translating a transmission source address into a management address belonging to a third address system that is different from first and second address systems of a first and second network, respectively. First, Crump discloses multiple address domains (address systems) for different networks. Crump discloses translating a source address of one network into a global address that is part of a global address system [column 4 «lines 22-44»]. Crump's global address system is "different" from the first and second address systems of the network [Figures 1, 2A, 2B].

Second, Boden disclose that two networks that each have different address systems [column 10 «line 58» to column 11 «line 7»]. Boden discloses translating a transmission source address into a management address that is part of an addressing system that is different from the first and second address systems [column 6 «line 60» to column 7 «line 15»]. Boden discloses translating an address from a first

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network into an address for the virtual private network (virtual address) [column 7  
«lines 3-18»].

## II. CONCLUSION

For the foregoing reasons, Applicant's arguments are unpersuasive and Applicant's amendments do not overcome the prior art references. The claim rejections set forth in the previous action are maintained because the prior art references teach the limitations as they are currently claimed.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3> Claims 9-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. As to the independent claims, the modifier "defined by the NAT" does not particularly claim the subject matter of the invention as it is not clear what element in the claim is defined by the NAT. Dependent claims are rejected for the dependency on the independent claims.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4> Only those claims that have been amended by Applicant are formally addressed in this action. Those claims that are not specifically address in this action can be found in a prior Office action.

5> Claim 9-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Denison et al, U.S Patent No. 6,581,108 ["Denison"], in view of Boden et al, U.S Patent No. 6,832,322 ["Boden"].

6> In regards to claim 9, Denison et al. disclose a management protocol proxy (102) for performing network management between a first and a second network connected via an Internet Protocol (IP) Network address Translator (104), comprising:

a address translation process unit that translates a transmission source address contained in a packet of a management protocol transmitted from a monitor apparatus on the first network (112-1 to 112-N) connected by the management protocol proxy (102) into a management address belonging to a third address system different from first and second address systems of the first and second network, respectively, defined by the NAT ( e.g. translation by a different address system than a NAT performed by 102-col. 3 ll. 22-26, col. 3 ll. 31-43)

an assembly/disassembly processing unit that generates management protocol proxy data including the packet of management protocol after the address translation, a transmission source address in which an address of the management protocol proxy is sent, and a transmission destination address in which an address of another management protocol proxy (106) is set (e.g. col. 3 ll. 28-30)

a communication unit that transmits the management protocol proxy data to said another management protocol proxy (106) designated by the transmission destination address (e.g. col. 3 ll. 28-30).

Dennison does not explicitly recite "transmission destination address in which an address of another management protocol proxy setting an address to that of another management".

7> Boden discloses translating an address to a management address that belongs to an address system different from an address system defined by the NAT [Figure 2 | column 4 «lines 6-13»]. The address is translated to a virtual address for the VPN; the VPN has a different address system than the first and second networks. Boden discloses that the benefits of his invention alleviates a problem of address management, communicating between different networks and address systems, behind NATs [column 2 «line 62» to column 3 «line 3»]. Thus, it would have been obvious to one of ordinary skill in the art to modify Denison's network address management system with the address translation methods as taught by Boden to provide a simpler means for networks of different address domains to traverse NATs.



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8> In regards to claim 10, Dennison discloses the management protocol proxy according to claim 9, further comprising:

an address translation definition (e.g. look up process in a translation table col. 5-6) defining correspondence relationships between management address belonging to the third address system different from the first and second address systems defined by the NAT and real addresses (e.g. address translation on payload packets PDUs col. 4 ll. 24-38, col. 5 ll. 1-6),

wherein the address translation-processing unit (e.g. look up process col. 5-6) translates the transmission source address contained in the packet of management protocol into a management address (e.g. IP address replaced with translated IP address col. 4 ll. 36-37), based on the address translation definition (e.g. address translation on payload packets PDUs col. 4 ll. 24-38, col. 5 ll. 1-6).

9> In regards to claims 19 and 28, as it does not teach or further define over previously claimed limitations, they are rejected for at least the same reasons set forth in the rejection of claim 9 above.

10> In regards to claims 20 and 29, as it does not teach or further define over previously claimed limitations, they are rejected for at least the same reasons set forth in the rejection of claim 10 above.

11> Claims 9, 10, 14, 17-20, 24, 27-30, 33 and 36 are rejected under 35 U.S.C § 103(a) as being unpatentable over Crump et al, U.S Patent No. 6,892,245 ["Crump"].

12> As to claim 9, Crump discloses a management protocol proxy for performing network management between a first network and a second network connected via an Internet Protocol (IP) Network Address Translator (NAT) [Figure 1 : local DNS servers], comprising:

an address translation processing unit that translates a transmission source address, contained in a packet of management protocol transmitted from a monitored apparatus on the first network connected by the management protocol proxy, into a management address belonging to a third address system different from first and second address systems of the first network and the second network, respectively, defined by the NAT [Figure 1 | column 1 «line 65» to column 2 «line 15» | column 7 «lines 30-51» where : Crump's local DNS servers correspond to a protocol proxy, each DNS server in a separate address; see also response to Applicant's arguments above];

an assembly|disassembly processing unit that generates management protocol proxy data including the packet of management protocol after the address translation, a transmission source address in which an address of the management protocol proxy is set, and a transmission destination address in which an address of another management protocol proxy is set [Figures 2A-2D | Figure 10A | column 3 «lines 29-61»]; and

a communication unit that transmits the management protocol proxy data to said another management protocol proxy designated by the transmission destination address [Figure 1 | column 8 «lines 20-59» : "Local DNS servers"].

Crump does not expressly disclose that the first and second address systems are defined by the NAT, but it would have been obvious to one of ordinary skill in the art to have reasonably inferred this functionality on the basis of Crump's figure 1 which illustrates a NAT that interconnects the different address systems of the four networks. Additionally, Crump discloses translating the source address into a global address; this global address is part of an address system that is different from the address systems of the four networks [column 6 «line 66» to column 7 «line 34»].

13> As to claims 10 and 14, Crump discloses the management protocol proxy further comprising:

an address translation definition defining correspondence relationships between management addresses belonging to the third address system different from the first and second address systems defined by the NAT and real addresses [see Crump, Figures 10B, 12A-P],

wherein the address translation processing unit translates the transmission source address contained in the packet of a management protocol into a management address, based on the address translation definition [see Crump, Figure 10B].

14> As to claim 11, Crump further discloses translating address information in data contained in the packet of management protocol [column 10 «lines 25-34»].

15> As to claim 17, Crump discloses a proxy server [Figure 1].

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16> As to claim 18, Crump does not expressly disclose translating into a virtual address.

Boden discloses translating a transmission source address into a virtual address [column 7 «lines 3-18»]. It would have been obvious to one of ordinary skill in the art to modify Crump to include Boden's virtual address translation. One would have been motivated to provide such a combination to enable better address resolution.

17> As to claims 19, 20, 24, 27-30, 33 and 36, as they do not teach or further define over the previously claimed limitations, they are similarly rejected for at least the same reasons set forth for claims 1, 2, 10, 11 and 18.

#### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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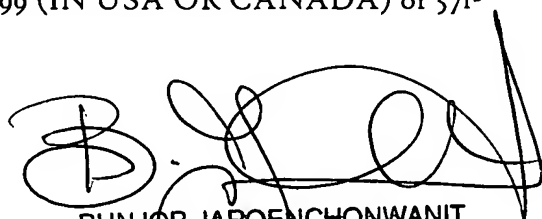
the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dohm Chankong whose telephone number is 571.272.3942. The examiner can normally be reached on Tuesday-Friday [7:30 AM to 4:30 PM].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571.272.3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DC



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SUPERVISORY PATENT EXAMINER